

REMARKS

Claims 1, 12, 13, 15, 16, 19, 28 and 35 are amended. Claims 49-51 are added. Claims 11, 14, 20-23 and 34 are canceled. Claims 1-10, 12, 13, 15-19, 24-33, 35 and 49-51 are in the application for consideration.

Independent claims 1, 13 and 28 stand rejected as being obvious over U.S. Patent No. 4,320,191 to Yoshikawa et al. The independent claims have been amended to recite that the exposing of the photoresist to actinic radiation is effective to pattern photoresist to form photoresist patterns over the antireflective coating. Further, the independent claims are amended to recite that the patterning of the substrate is through openings in the photoresist and the antireflective coating using the photoresist pattern and the antireflective coating as a mask. Accordingly thereby, the photoresist patterns are on the substrate during at least some of such patterning of the substrate. Further, the independent claims are amended to include that the openings in the photoresist and the antireflective coatings are formed by solvent processing of the photoresist after the exposing to form the photoresist openings, followed by dry etching all of the antireflective coating exposed through the photoresist openings. Dependent claims 11, 14 and 34 have thus been canceled.

The Examiner has interpreted the silver layer 3 of Yoshikawa et al. as comprising photoresist. This is in error. The definition of photoresist inherently requires some photoactive/photosensitive material. Silver is not inherently such a material. For example, silver deposited over a substrate is not inherently photosensitive absent some reaction with an underlying layer such as a

selenium germanium material. Even Yoshikawa et al. essentially discloses such at col.1, Ins.41-43 and col.2, Ins.3-9. Such clearly there discloses a photoresist as comprising a composite or combination of chalcogenide material and a thin silver layer. Accordingly, there is no disclosure or suggestion that silver by itself is inherently photosensitive. Therefore, the Examiner's conclusion that silver layer 3 in the figures of Yoshikawa et al. can be construed as a "photoresist" as that term is understood by people of skill in the art is in error.

Claim 1 is amended to emphasize that the recited patterning occurs using the photoresist patterns and antireflective coating as a mask. Even accepting the Examiner's erroneous interpretation that silver layer 3 can be considered as a "photoresist", the alleged patterning depicted by Yoshikawa et al. in Fig. 6 occurs only after silver layer 3 has been removed, and accordingly does not occur while at least some of such is on the substrate during at least some of the patterning, as is now inherently required by Applicant's independent claims. Accordingly, Applicant's independent claims as amended should be allowed over Yoshikawa et al., and action to that end is requested.

Independent claims 1 and 13 stand rejected as being obvious over Japanese Publication No. JP 60226123. However, such independent claims recite dry etching of all of the antireflective coating exposed through the photoresist openings. On the other hand, the Japanese '123 reference teaches wet solvent processing to produce its mask 4, followed by further wet processing to produce its Figs. 1c and 3c constructions. Accordingly, the reference in no way discloses or suggests dry etching all of the antireflective coating which is

exposed by the photoresist openings. For at least these reasons, claims 1 and 13 as amended are in no way suggested by the Japanese '123 reference whether taken alone or in combination with Yoshikawa et al. or any other reference of record. Accordingly, independent claims 1 and 13 should be allowed, and action to that end is requested.

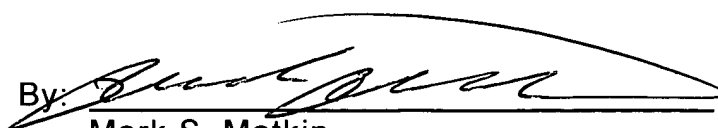
The recitation of the antireflective coating having a total thickness which is less than that of the photoresist has been removed from the independent claims, and added as dependent claim subject matter in claims 49-51. Further in light of the amendments to independent claims 1, 13 and 28, claims 20-23 have been canceled.

The undersigned and Examiner Pham discussed the additional amendments made herein to the independent claims on March 3, 2004, with the Examiner during such interview indicating that such amendments would make the independent claims allowable. Action to that end is requested.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for these own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

Respectfully submitted,

Dated: 6-2-04

By: 
Mark S. Matkin
Reg. No. 32,268